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10/728,641

12/05/2003

Hye Kyung C. Timken

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EXAMINER

NGUYEN, CAM N

ART UNIT

PAPER NUMBER

1754

MAIL DATE

DELIVERY MODE

05/16/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

**Application No.**

10/728,641

**Applicant(s)**

TIMKEN, HYE KYUNG C.

**Examiner**

Cam N. Nguyen

**Art Unit**

1754

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 03/08/07 (an amendment, TD, & Declaratio.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-9 and 12-25 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-9 & 12-25 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on originally filed is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### Response to Amendment

1. Applicants' amendment and remarks, filed March 08, 2007, have been made of record and entered. Claims 10-11 have been previously canceled. Claims 21-25 have been added.

Claims 1-9 & 12-25 are currently pending in the application.

### Terminal Disclaimer

2. The terminal disclaimer filed on March 08, 2007 disclaiming the terminal portion of any patent granted on this application which would extend beyond the expiration date of US Pat. 6,872,685 B2 has been reviewed and is accepted. The terminal disclaimer has been recorded.

### Double Patenting

3. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

4. Claims 1-9 & 12-25 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-4 of U.S. Patent No. 6,995,112 B2. Although the conflicting claims are not identical, they are not patentably distinct from each other because of the following reasons.

It is considered the claimed catalyst or catalyst support inherently possesses the properties as disclosed in the Pat. '112, "a crystalline alumina phase is present in an amount of no greater than about 5%" and other disclosed properties, because the catalyst or catalyst support is the same.

**Claim Rejections - 35 USC § 102(e)**

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. Claims 1-9 & 12-25 are rejected under 35 U.S.C. 102(e) as being anticipated by Timken et al., "hereinafter Timken '112", (US Pat. 6,995,112 B2).

The applied reference has a common inventor (Timken) with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived

from the inventor of this application and is thus not the invention "by another," or by an appropriate showing under 37 CFR 1.131.

Timken '112 discloses a highly homogeneous amorphous silica-alumina cogel catalyst having a Surface to Bulk Si/Al ratio of from about 0.9 to about 1.1, and wherein a crystalline alumina phase is present in an amount of no greater than about 5%, wherein the catalyst comprises from about 10 weight percent to about 90 weight percent  $\text{Al}_2\text{O}_3$  (see col. 12, claim 1). The catalyst further comprises a binder (see col. 12, claim 4).

The claimed alumina concentrations are falling within or overlapping with the disclosed alumina concentrations, thus the claims are met.

With respect to the claimed x-ray diffraction properties, it is inherent that the disclosed catalyst material would possess the same catalytic properties in view of the same catalyst components, alumina concentrations, and Surface to Bulk Si/Al ratio disclosed and being claimed.

**Claim Rejections - 35 USC § 102(b)**

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

8. Claims 1-5, 8-9, 12, 14-16, 21-22, & 25 are rejected under 35 U.S.C. 102(b) as being anticipated by Pecoraro (US Pat. 4,988,659).

Pecoraro discloses an amorphous silica-alumina cogel catalyst composition (see col. 3, ln 35- col. 4, ln 18 & col. 6, ln 31).

With respect to the claimed x-ray diffraction properties, it is inherent that the disclosed catalyst material would possess the same catalytic properties in view of the same catalyst components disclosed and being claimed.

**Claim Rejections - 35 USC § 103**

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claims 6, 7, 13, & 23-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pecoraro (US Pat. 4,988,659).

Pecoraro discloses an amorphous silica-alumina cogel catalyst composition as described above, except for the claimed alumina concentrations.

It would have been *prima facie obvious* to one of ordinary skill in the art at time the invention was made to have optimized the alumina concentrations in Pecoraro in order to achieve an effective catalyst or catalyst support material, because of *In re Boesch*.

11. Claims 17-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pecoraro (US Pat. 4,988,659) taken together with Jaffe (US Pat. 4,289,653).

Pecoraro discloses an amorphous silica-alumina cogel catalyst composition (see col. 3, ln 35- col. 4, ln 18 & col. 6, ln 31).

Pecoraro does not disclose the catalytically active Group VIII metal. It would have been *prima facie obvious* to one of ordinary skill in the art at time the invention was made to have incorporated the Group VIII metal into the catalyst composition of Pecoraro in order to achieve an effective catalyst because Group VIII metals are known and useful active catalyst components, as evidenced by Jaffe (see Jaffe at col.4, ln 3-25).

With respect to the claimed x-ray diffraction properties, it is inherent that the disclosed catalyst material would possess the same catalytic properties in view of the same catalyst components disclosed and being claimed.

**Response to Applicants' Arguments**

12. Applicants' amendment and response filed on March 08, 2007 has been fully considered, but not deemed persuasive for the following reasons.

Applicants' urging regarding the rejections made under Double Patenting and under 102(e) as being anticipated by Timken '112 have been noted. However, Examiner did not quite understand applicants' assertion. Timken '112 patent has an issued date of Feb. 7, 2006, but since its' earliest effective filing date is Nov. 8, 2002, and it has an additional inventor named "Mohammad M. Habib" other than Hye Kyung C. Timken, it is therefore qualified as a prior art under a 102(e). The explanation of the differences in the disclosed subject matter and the claimed subject was discussed in previous office action under both sections. See paragraphs 4 and 6 above.

Applicants' submission of a Declaration under 1.132 has been considered. It would appear that the declaration as submitted did not compare the claimed subject matter with the subject matter of the closest prior art because of the following reasons. First, the instant claims

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are drawn to a product and not a process of making a product, thus applicants' arguments regarding the differences in the process conditions, such as pH, time, mixing procedures, etc. are not found persuasive. Second, Pecoraco '659 discloses the same cogelled silica-alumina cogel as claimed, but is silent with respect to the surface to Bulk modifying-metal/base-metal atomic ratio and X-ray diffraction pattern properties. However, Pecoraco '659 teaches the composition has a surface area of between about 150 and 450 m<sup>2</sup>/g (see col. 9, claim 3), which encompassed the surface areas as shown on page 12, Table 1 of applicants' specification. Thus, it is only reasonable to conclude that the disclosed composition would inherently possess the same X-ray diffraction pattern and atomic ratio properties as required in the instant claims.

The claimed composition does not appear patentably distinguish from the disclosed composition. Thus, the rejections are maintained.

**13. THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.



**Conclusion**

14. Claims 1-9 & 12-25 are pending. Claims 1-9 & 12-25 are rejected. No claims are allowed.

**Contacts**

15. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Primary Examiner Cam N Nguyen, whose telephone number is 571-272-1357. The examiner can normally be reached on M-F, 9:00 AM - 6:30 PM, at alternative work site.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stanley Silverman, can be reached on 571-272-1358. The fax phone number for the organization where this application or proceeding is assigned is 571-272-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Cam N. Nguyen/

Nguyen/cnn

Primary Examiner

May 09, 2007

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